

EDITORIAL JOURNAL BOX

10-12/79

Volume 28

Issue 137

GUEST EDITORIAL

OPPORTUNITY

People often ask what they receive for their money when they become a member of AMRA. Sure they know that they receive the initial literature, the 'Beginners Guide', the 'Standards', the 'Constitution' and 'A Guide to Model Railways', and they know they will receive at least four journals each year, but, what else?

The answer to this question can be easily stated in one word - opportunity. Unlike the already mentioned benefits which are passive benefits - a member receives these with no effort on his part except for paying his subscription, opportunity is an 'active' benefit, the member has to make an effort to reach out and grab it, and if he does he will benefit from his subscription money many times over.

The opportunity is there to attend Branch meetings, both in this State and Australia wide, to pick up new ideas, to give ideas to others. The opportunity is also there to share one's ideas in a visual and written form through the pages of Journal, and to display one's modelling at the Exhibitions, or by entering a model in our competitions.

The opportunities within the hobby that one can gain by being a member of AMRA are only limited by one's initiative and enterprise, or by the time needed to fully enjoy all the opportunities which are there for the asking. Fortunately, AMRA membership is one of the very few things about which the old saying about opportunity is not true - it does knock more than once, and it knocks loud and often.

Graham Watson

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THE SECRETARY'S DESK



A couple of issues ago in the NMRA Bulletin, the Editorial was headed 'We read, but do not comprehend'. Now I thought that is just about the case out here. This year, we sent the accounts out on a coloured paper, with the idea that it would be easier to find, and not so likely to go astray. However, subscriptions still come back without a form, not even using the envelope sent with the account. There are also the odd cheques with just a squiggle, and no other information, which have to be placed in the query file and wait for some spare time to decipher them.

Another thing which intrigues me, is that some of the voting slips come in from odd sources, with the story that they do not know where the Federal Secretary lives! Now I know Journal is running late, but my address has appeared in it for the last 11 years. Geoff Chatwin's name appears on the accounts, but some of the attached notes are addressed 'Dear Madam'.

The Federal Competitions were held in conjunction with the NSW Branch Exhibition, and the details appeared in the Nov/Dec 1978 issue, but again some members claimed to know nothing about the competitions.

The Competitions will again be held in conjunction with the NSW Branch Exhibition in October 1980, and for clarification of the various categories, I have gone through the minute books to check on the original classifications. They are as follows:

- 1 TIM DUNLOP TROPHY Scratch built locomotive or rail car in working order, motor, wheels and small fittings allowed of proprietary manufacture
- 2 FEDERAL TROPHY For the conver-

sion, alteration, or modification of any commercial model of a locomotive (steam, electric, diesel, railbus or railcar)

- 3 NSW BRANCH CUP Scratch built passenger stock, commercial bogies, axle boxes, couplings and wheels allowed
- 4 KEITH WILCOX CUP Scratch built goods stock, commercial bogies, axle boxes, wheels and couplers allowed
- 5 VIC BRANCH CUP For the conversion or modification of rolling stock, of any commercial product or model of any prototype
- 6 CANDEMAH CUP For any piece of lineside structure

Sections 1, 2 and 6 are perpetual trophies, but the winners receive a smaller replica cup. As often happens, when there is a marginal placing between first and second places, a certificate will be given for the second place. I hope this will appear in time for potential starters to complete a model in time for judging on 4 October 1980.

It is hoped that members will study the Balance Sheet, and if they have any queries they should contact me. It should be noted, that although a Bank balance of \$2023.12 is shown, because of the unfortunate delays with Journal there are still three issues to be paid for in the period up to the 30 June, hence our decision to revert to four issues yearly.

Anyone who has any experience with printing costs will know what prompted that decision. The amount in the Building Society is a sinking fund, to cover the replacement of the duplicator or typewriters, when the time comes.

We still have the policy of forward-

ing on all Journals due to a member, even if he does not renew his subscription. Especially so this year as we are so far behind. The C.O.M. earnestly hopes that such a position will not arise in the future, but there has been a combination of factors, over which we had no control which brought about this situation.

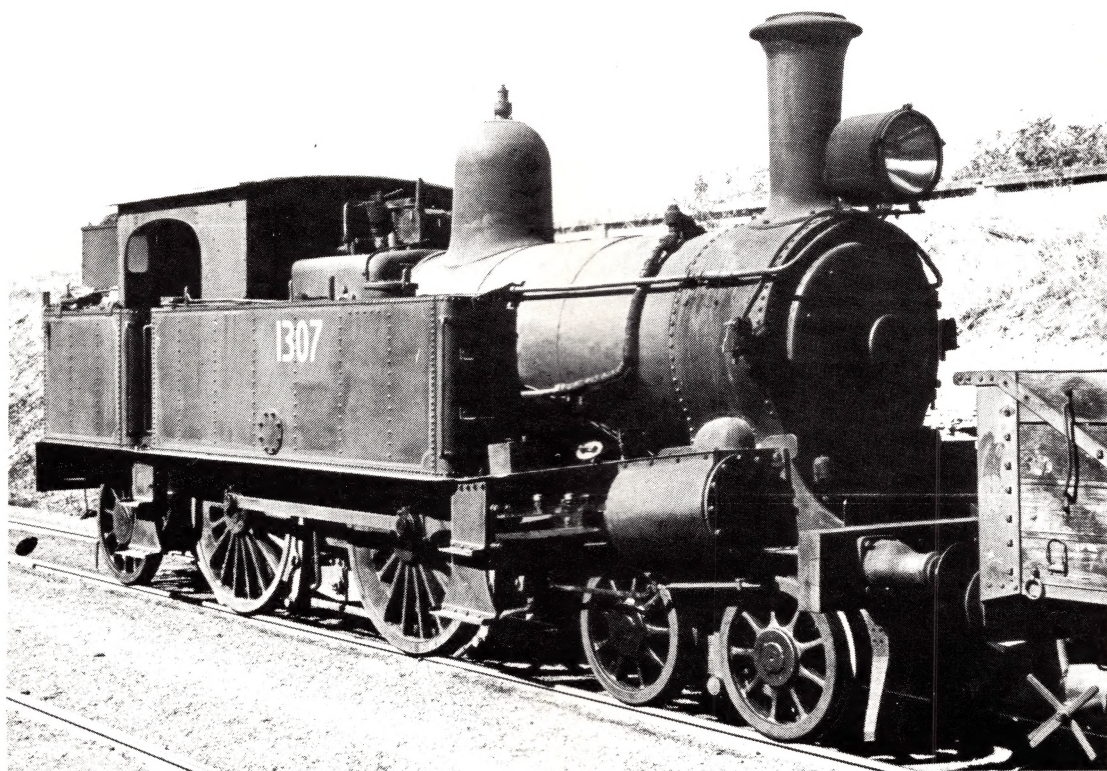
The C.O.M. wishes all members the compliments of the season, and may all the Branches have successful Exhibitions in 1980.

Norm Read
Federal Secretary

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Shunting Clyde Yards, October 1971

Photo by J Parker

AUSTRALIAN MODEL RAILWAY ASSOCIATION FEDERAL COMMITTEE OF MANAGEMENTSTATEMENT OF RECEIPTS AND EXPENDITURE FOR YEAR ENDED 30 JUNE 1979

| <u>RECEIPTS</u> | | <u>EXPENDITURE</u> | |
|---------------------------------|--------------------|----------------------------------|--------------------|
| Cash at bank 30 June 1978 | 4 334.62 | Printing in Journal | 5 954.90 |
| Petty cash on hand 30 June 1978 | 150.00 | Postage of Journal | 416.24 |
| New members' subscriptions | 431.75 | Journal expenses | 373.50 |
| Membership renewals | 3 035.50 | Stationery | 738.39 |
| A.M.R.A. Journal subscriptions | 1 221.75 | General postage | 467.47 |
| Joining fees | 678.00 | Trophies and awards | 94.99 |
| Donations | 28.24 | Bank charges | 74.90 |
| Advertising in Journal | 504.40 | Repairs and service to equipment | 177.05 |
| Sale of guides | 25.00 | Federal Registrar expenses | 52.70 |
| Interest | 129.47 | Photocopying | 22.91 |
| Sale of track gauges | 1.25 | Insurance | 24.54 |
| Miscellaneous | 70.63 | Miscellaneous expenses | 9.90 |
| | | Cash at bank 30 June 1979 | 2 023.12 |
| | | Petty cash on hand 30 June 1979 | 180.00 |
| | <u>\$10 610.61</u> | | <u>\$10 610.61</u> |

STATEMENT OF FUNDS AT 30 JUNE 1979

| | | | |
|---|---------------------------------|-------------------|----------|
| Commonwealth Trading Bank, O'Connell Street, Sydney | Current account as above | 1 521.04 | 2 023.12 |
| Sydney Permanent Building Society Limited | Balance at 30 June 1978 | 64.64 | |
| | Interest credited November 1978 | 64.09 | |
| | Interest credited May 1979 | | |
| | Balance at 30 June 1979 | | |
| Petty cash on hand - as above | | 1 649.77 | |
| | | 180.00 | |
| | | <u>\$3 852.89</u> | |

AUDITOR'S REPORT

I have examined the books and records of the Federal Committee of the Australian Model Railway Association and report that in my opinion the above statement is a true and fair record of receipts and payments during the year ended 30 June 1979 and of cash funds on hand at that date.

R W Gorrell, F.C.A.

ABBOTSBURY SOUTHERN

By P A Knife

Abbotsbury is a small market town in the County of Dorset in southern England, not far from the county town of Dorchester. The town is served by a branch of the London and South Western Railway (latterly part of the Southern Railway) from Dorchester and a branch of the Great Western Railway from nearby Weymouth. While the town and GWR branch are real, the south branch is an imaginary 'might-have-been' and forms the prototype for my model - Abbotsbury Southern.

The layout has appeared in both the British and Australian press before and depicts the last couple of miles of the branch from the little passing station at Portesham East to the terminus at Abbotsbury Southern in the period 1936-38. It is built to 4 mm scale, 16.5 mm gauge (British 00) and is constructed basically to the 1976 AMRA 00/HO track and wheel standards. I have attempted to build to a consistent standard throughout, the locomotives, rolling stock, track work and scenery forming a cohesive picture and a reliable, trouble free model.

Being strictly portable the layout is quite small. Measuring 11 feet by 6 feet, it is U-shaped with a 'Denny' fiddle yard (or reversible traverser) forming the 'rest of the railway'. While this layout is of the end-to-end variety, the trains are not touched during operating as the whole traverser tray is reversed when all trains are facing in the wrong direction. Three link couplings are used on all stock which, although requiring manual coupling and uncoupling, is totally reliable and is fully authentic for the prototype.

The control system provides for three operators and features correct prototype operation using block bells and fully integrated block instruments.

Proper working signals are installed, using SR upper quadrants mounted on modified ratio lattice posts and controlled from lever frames at each station. Every operation on the layout is designed to be authentic, based on actual Southern Railway practice.

To further enhance the authenticity of the model, all of the railway buildings are scratch-built models of LSWR/SR prototypes chosen for their suitability. Non-railway buildings, such as the farm and the terrace of shops adjacent to Abbotsbury Southern station, are modified from kits, including Bilteezi, Superquick and Builder-Plus. The locomotive and rolling stock are, of course, fully representative of the prototype, locality and period being modelled and are of both kit-built and scratch-built varieties.

Abbotsbury Southern has been exhibited a number of times now, both in Sydney and Canberra. Exhibition operating can be very trying, particularly on an end-to-end layout when something needs to be kept moving at all times to maintain the interest of the viewing public. The main feature this model offers to viewers is consistent, reliable slow running while attempting to demonstrate strictly prototypical operation as realistically as possible. The only way this can be achieved is by having flat and perfectly laid track work and locomotives that always start when the power is turned on. No matter how pretty or realistic the scenery might be, if every locomotive needs to be prodded into life with a finger the illusion is soon destroyed. This is where, I hope, Abbotsbury Southern has been successful and perhaps helps to set the standard for other similar models.

When putting together my thoughts for

this article, I decided that I should mention some of the constructional details. A few brief words, too, on the baseboard and tracks construction would not be amiss. The importance of a firm, flat, strong base just cannot be over-emphasised. Whether the trackwork is to be proprietary, flexible or hand-laid, nothing will work if the foundation is insecure.

The base frames for the layout were very expertly made for me by Ken Gray, as was the most useful Denny fiddle yard. The Abbotsbury station boards are each 4' by 1'6" and are designed to fold together, the hinges being disguised by the scenery and buildings. This system is another most useful design by Peter Denny, published in the British modelling press some years ago. The boards covering the station area at Abbotsbury are surfaced fully with a firmly fixed layer of 3/8" plywood to which is contact cemented a layer of 1/2" Caneite. The remaining boards are of the open-frame type, the track bases being 1/2" Pineboard with, again, Caneite contact-cemented on top. The sub-frames in each case are built up from 2" x 1" dressed timber on a 9" square grid. Baseboard joins are achieved by wooden ledge to take the weight with 5/16" coach bolts to hold them together. The result is a baseboard that is strong and rigid, our main requirement for faultless running.

Basic scenery and groundwork is built on the hard shell system and zip textured. Here I must refer the reader to Bill McLanahan's excellent book 'Scenery for Model Railways' (Kalmbach Publications), obtainable at most hobby shops, as the definitive work on this subject. Although the book is American, it is applicable whatever your prototype or country.

The trackwork is hand laid on 1/8" cork sub-bases, using code 70 rail spiked to stained wood sleepers. While a British branch line prototype should really have bullhead rail, the very small flatbottom rail section looks the part at normal viewing distance. Points are

built on similar lines, although I bought the frog and switch rails as ready filed-up units. As spiking is not sufficiently strong or accurate pointwork, the rails are soldered to individual steel pins driven into every sleeper. All points, by the way, are No 6 frog angle. Briefly, the steps in track laying by this method are as follows:

- 1 The cork is cut 1 1/4" wide to conform to the track layout and the outer edged bevelled to represent the ballast shoulders.

- 2 Slow setting glue (I used Selley's 380) is spread along the base; the sleepers, set to correct spacing and alignment in a simple jig, are put in place using a strip of masking tape.

- 3 Ballast is poured on loose (I used Erg dyed cork ballast).

- 4 When the glue is dry the surplus ballast is swept off for further use.

The rails are then spiked in place using a track gauge, and the points built up in situ. While many people shy away from hand laid track, it really is easy, and is cheaper, more accurate, and more realistic than flexible track. Furthermore, pointwork can be tailored to the location rather than be limited to standard units. These days copper-clad sleepers is available, providing one of the quickest and easiest ways I know of to produce soldered trackwork. I have used this system where track crosses a baseboard join at the Abbotsbury layout. Should the rail ends come out of alignment, as often happens when setting up in strange surroundings such as an exhibition hall, a quick touch with a hot soldering iron restores the ends to alignment. It is simple, quick and reliable, and is far superior to the old ideas of baseboard joins using loose pieces of track or fishplates. Once again though properly made baseboards minimise the joint problem anyway, further assisting reliable and trouble-free running.

The electrical system on the Abbotsbury layout is quite involved and a full explanation would take far more space than this short article allows. How-

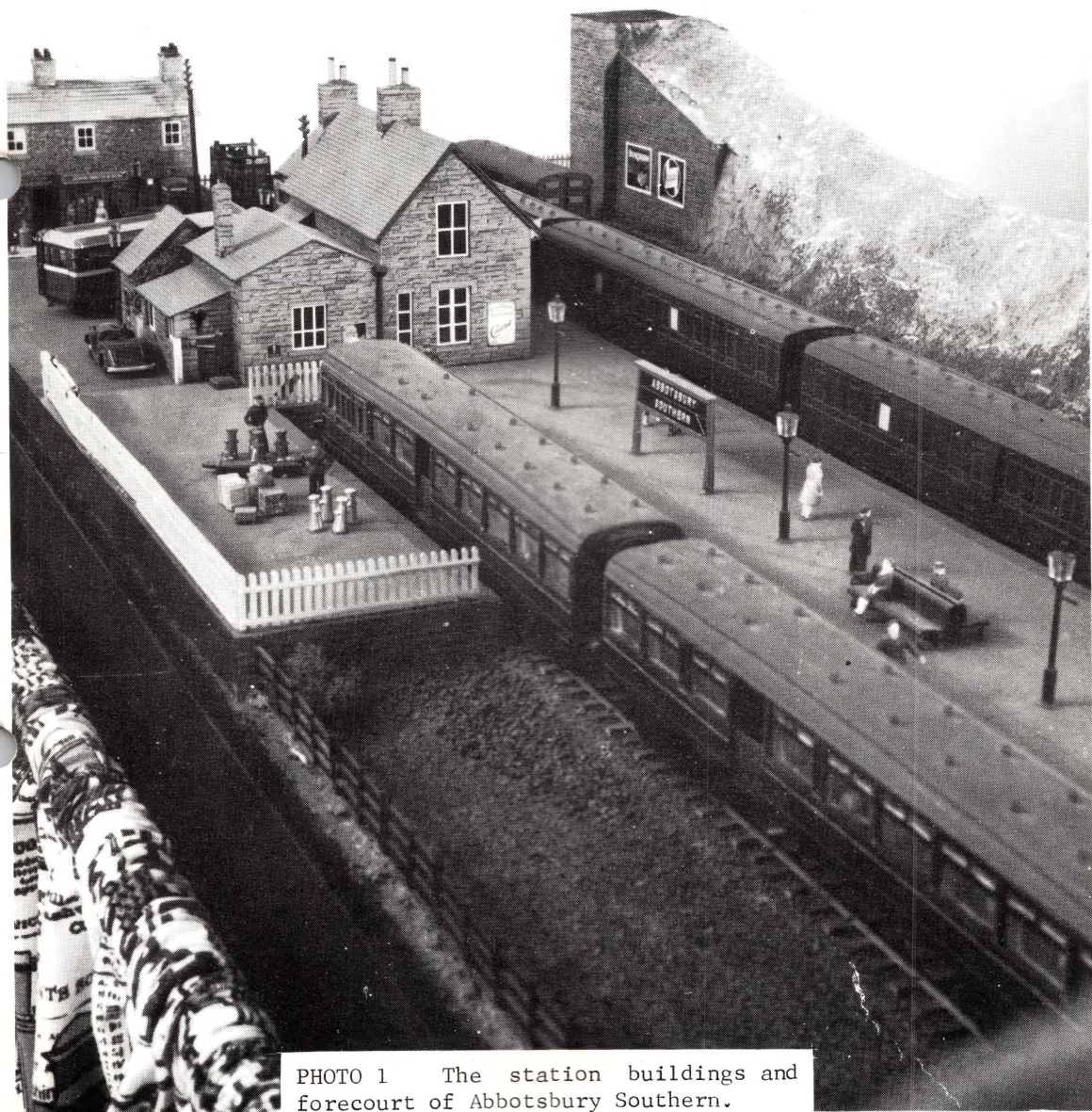
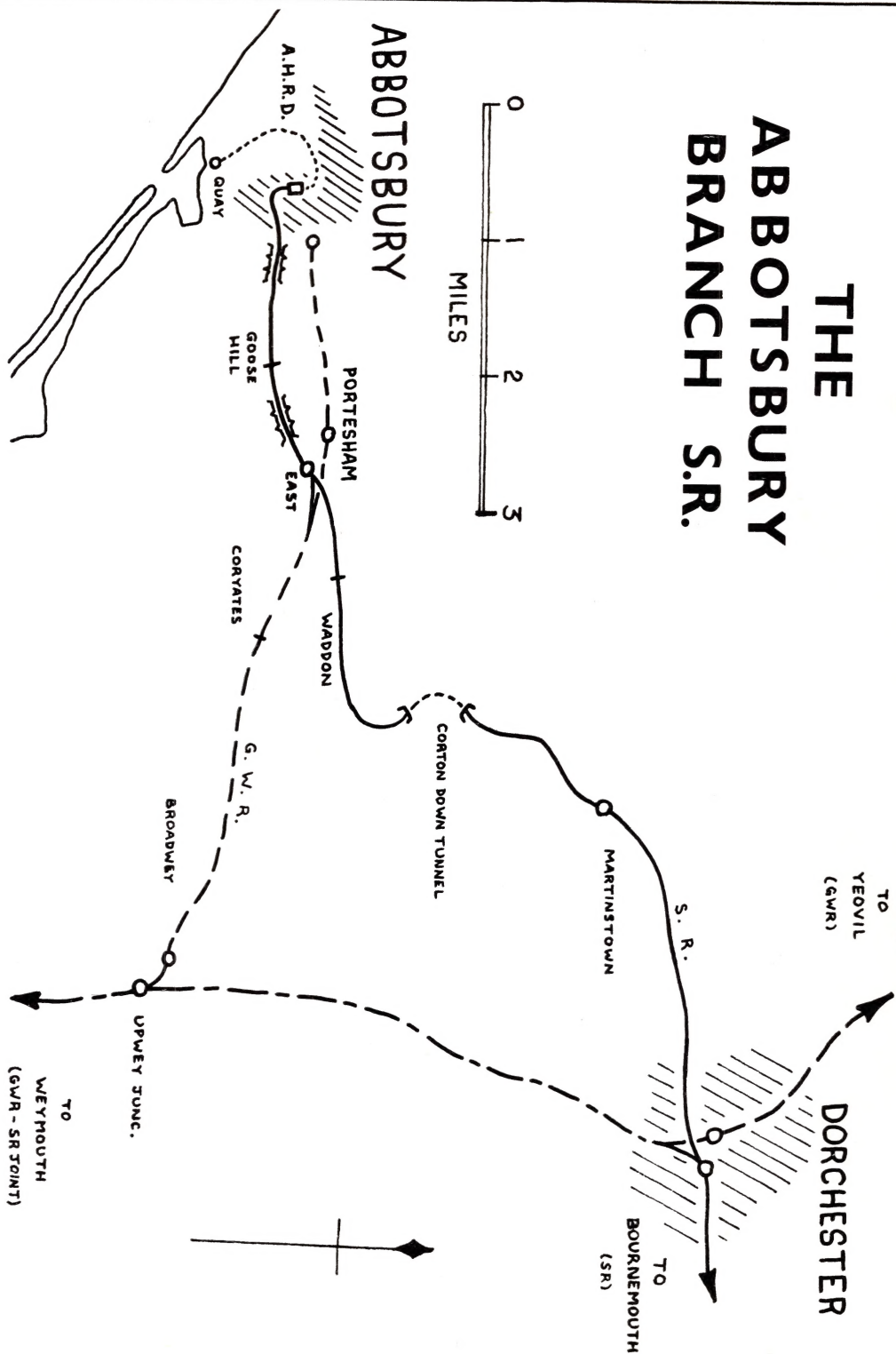


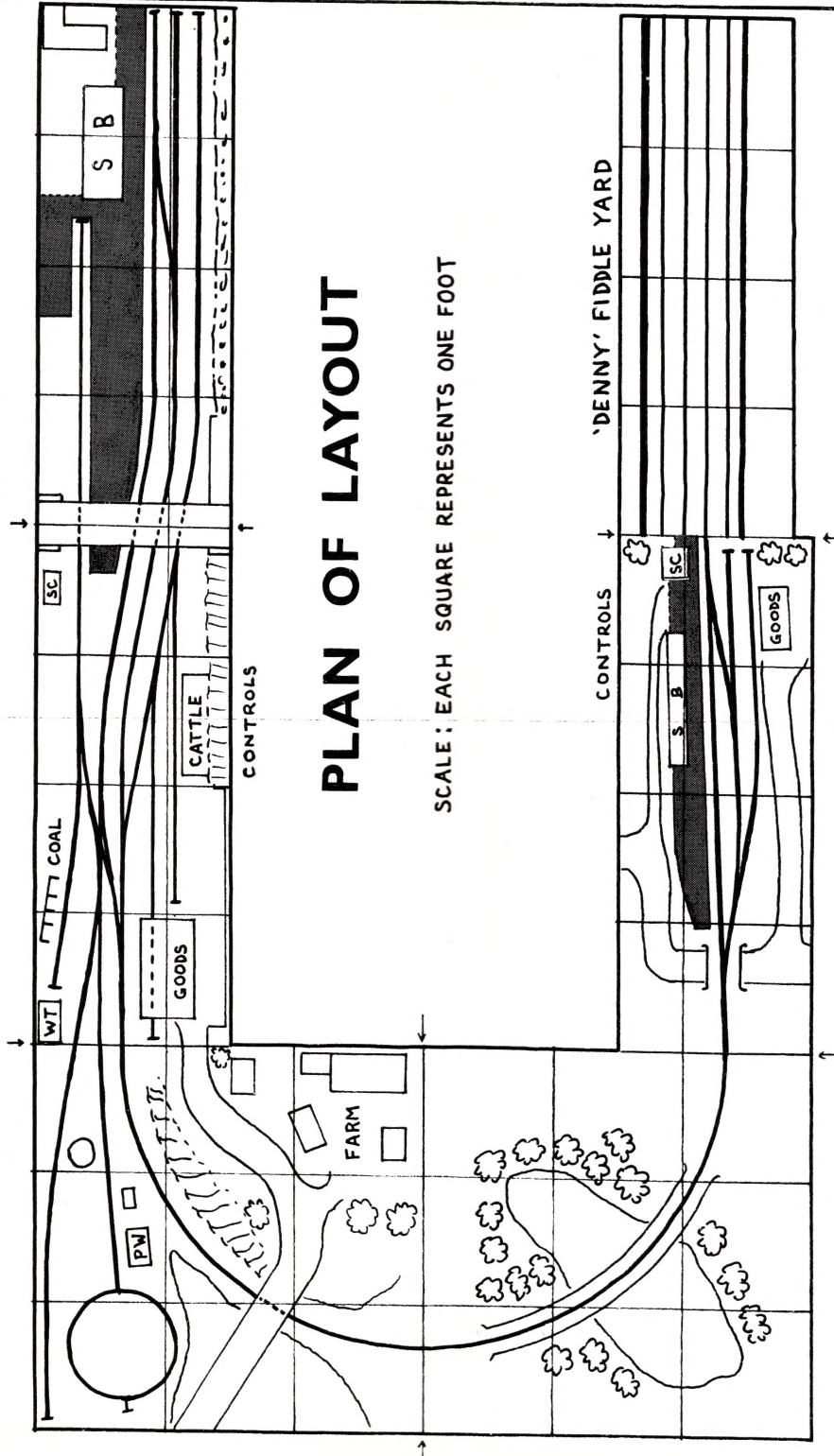
PHOTO 1 The station buildings and forecourt of Abbotsbury Southern.

Photo: Phil Knife

THE ABBOTSBURY BRANCH S.R.



ABBOTSBURY SOUTHERN



PLAN OF LAYOUT

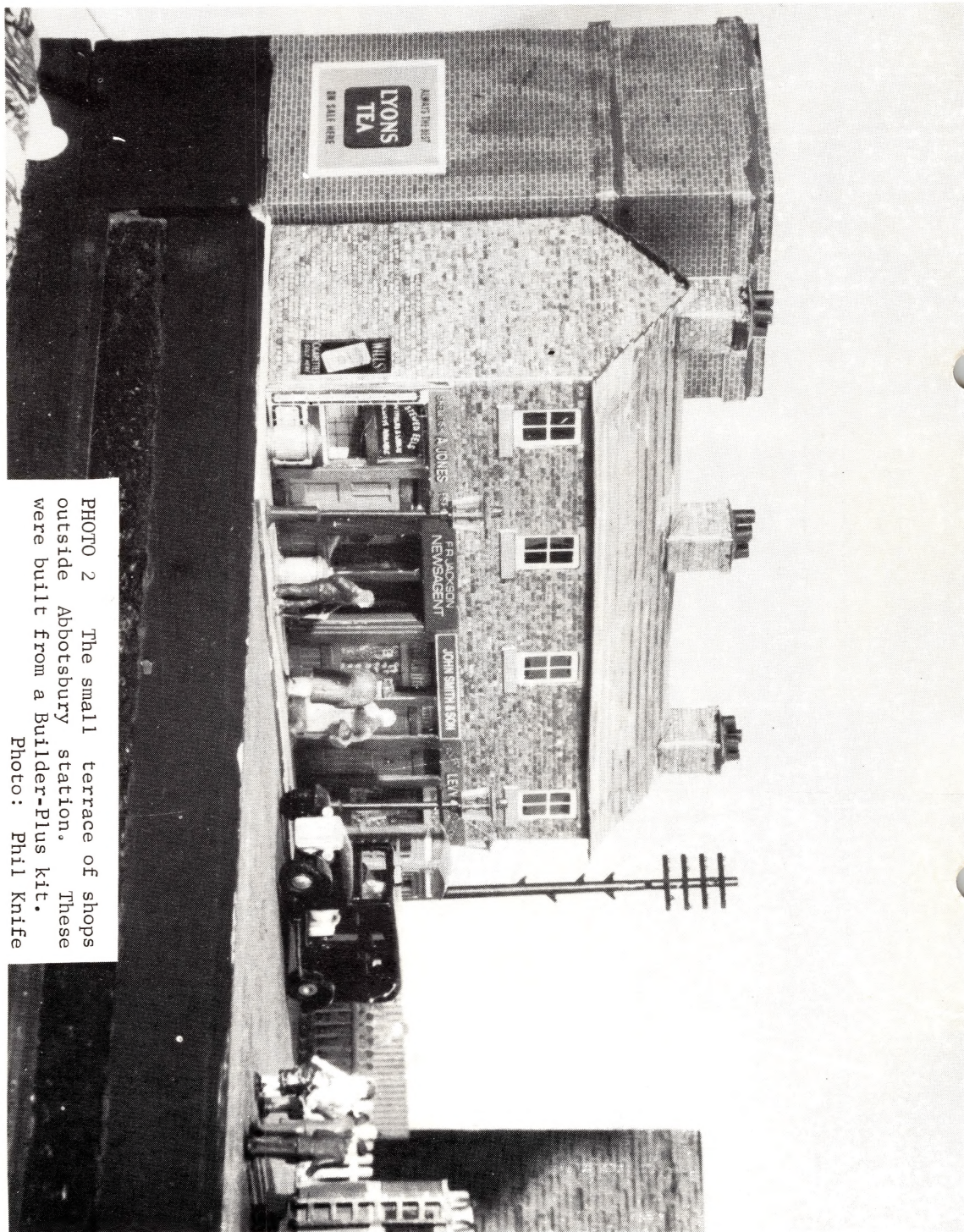


PHOTO 2 The small terrace of shops outside Abbotsbury station. These were built from a Builder-Plus kit.

Photo: Phil Knife

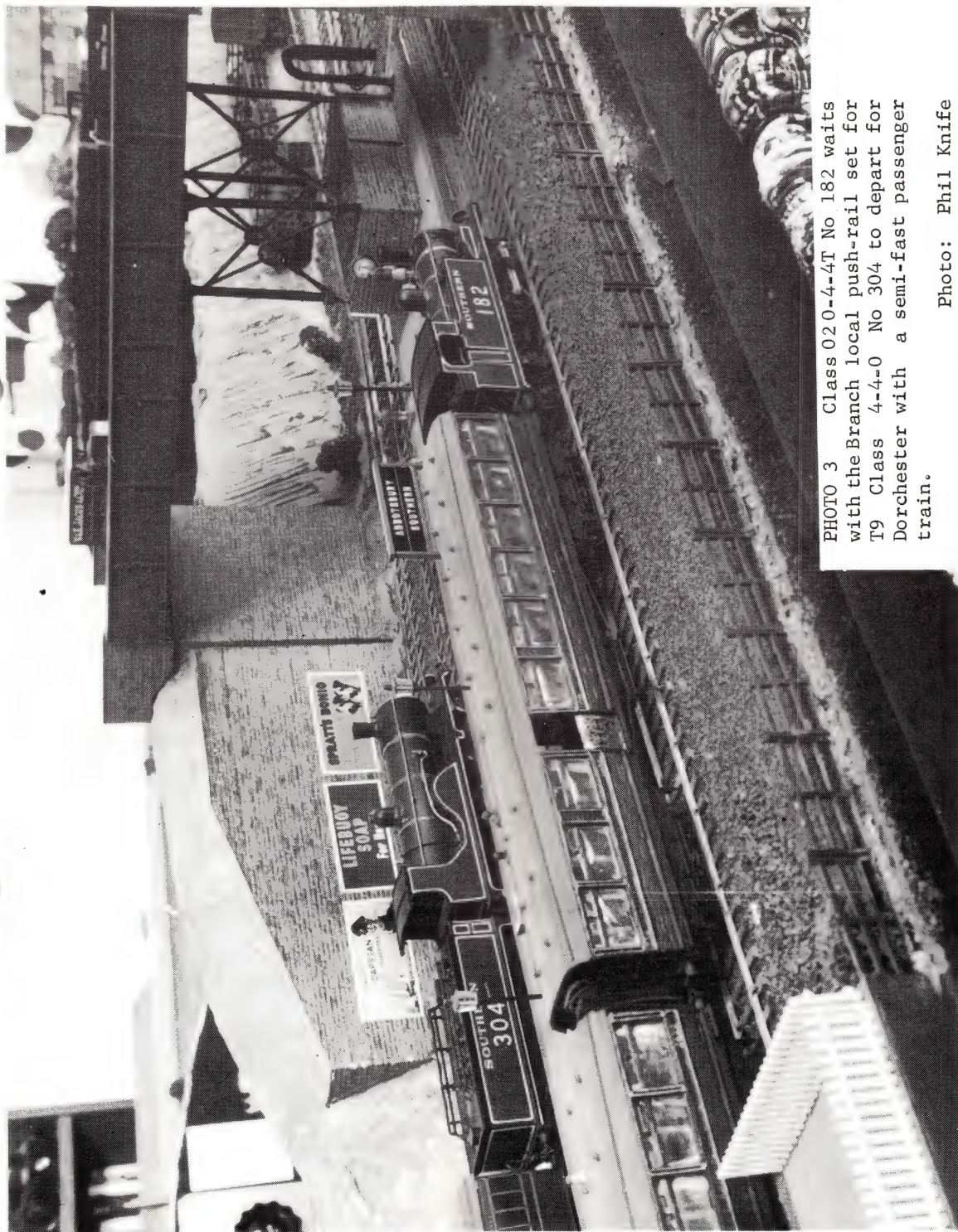


PHOTO 3 Class 020-4-4T No 182 waits with the Branch local push-rail set for T9 Class 4-4-0 No 304 to depart for Dorchester with a semi-fast passenger train.

Photo: Phil Knife

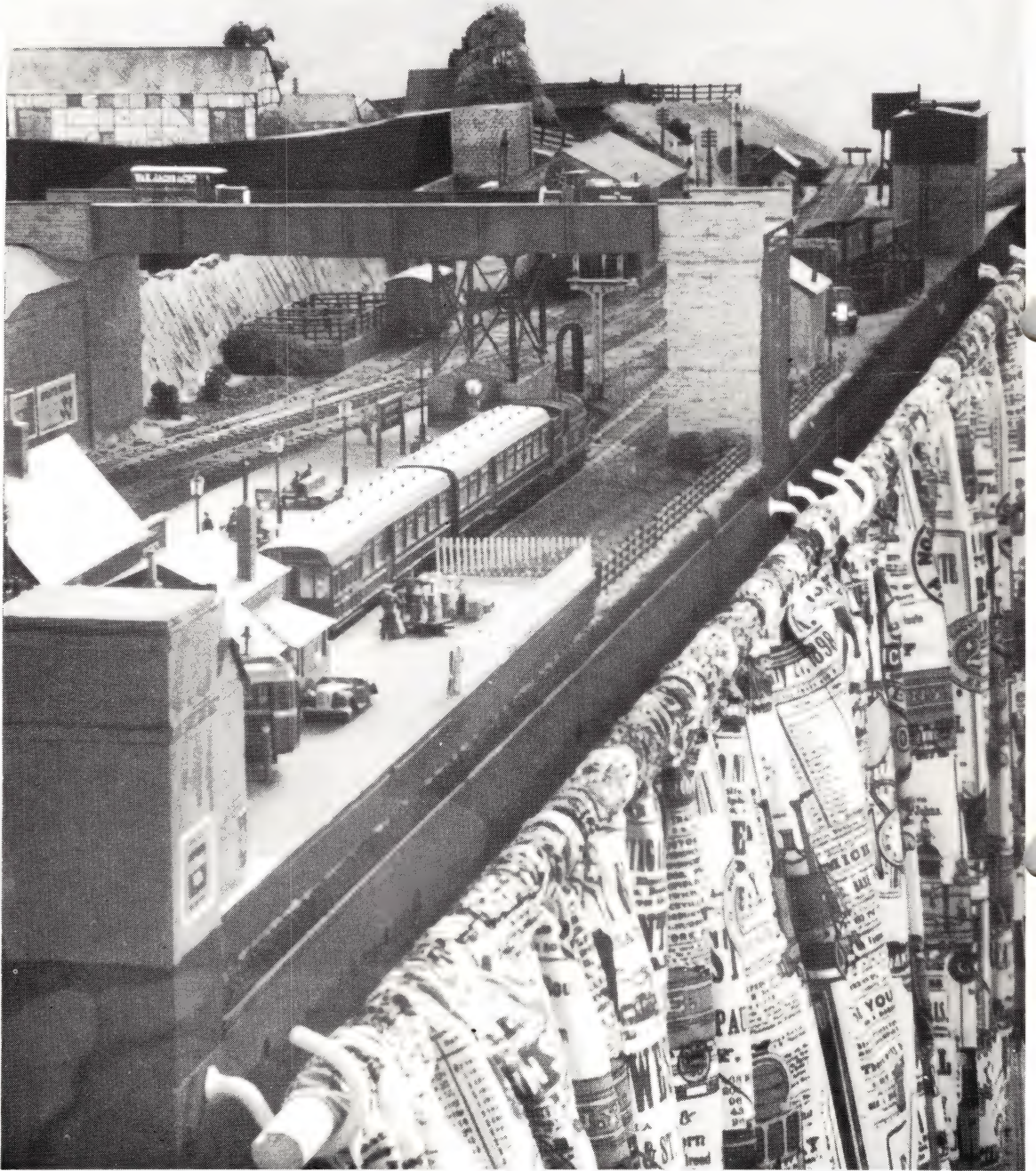


PHOTO 4 - General view of Abbotsbury
Southern station area.

Photo: Phil Knife

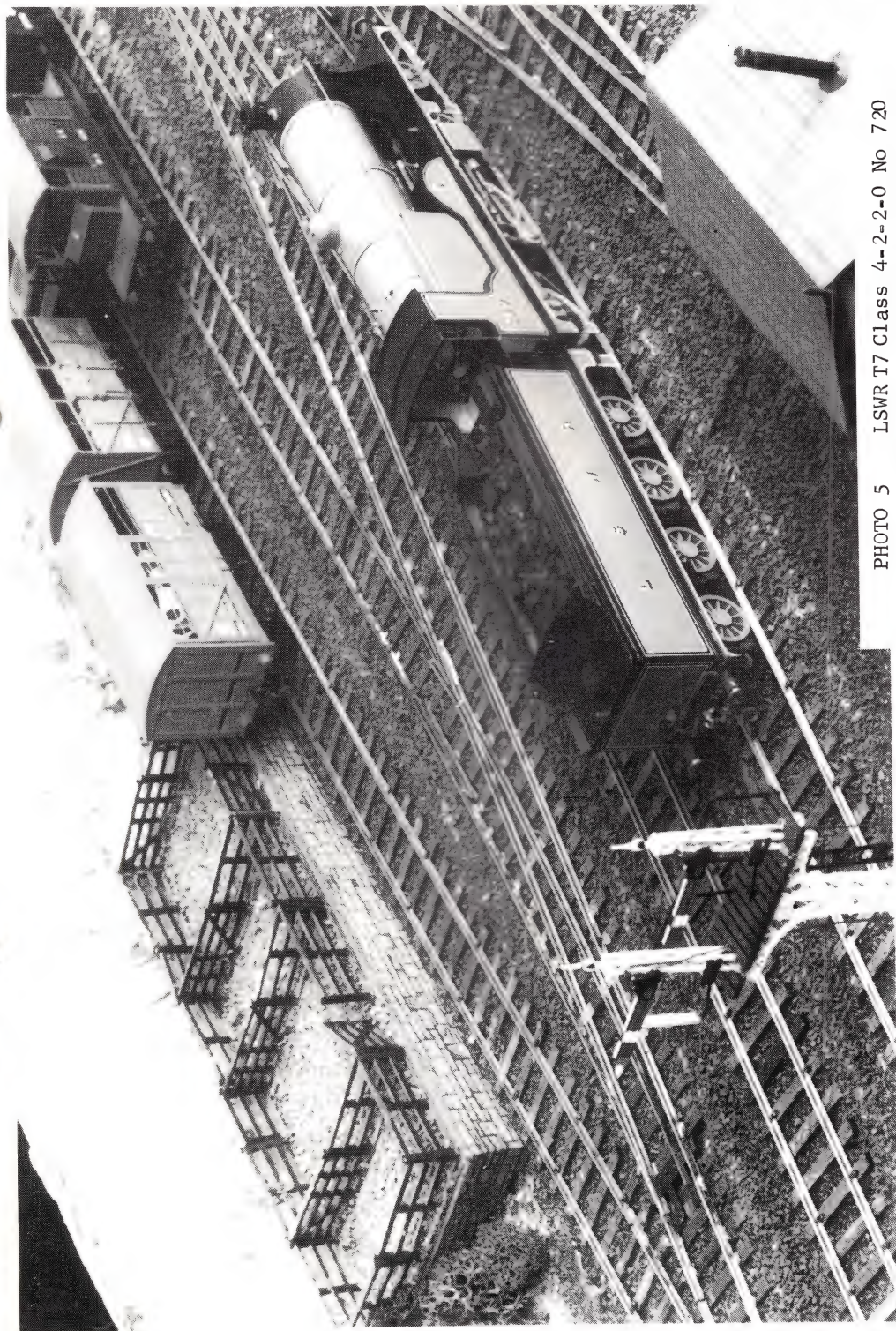


PHOTO 5 LSWR T7 Class 4-2-2-0 No 720 backs down to its train in the main platform at Abbotsbury. This magnificent loco was scratch built by Peter Betts.

Photo: Phil Knife



PHOTO 6 T9 Class 4-4-0 No 304 stands on the Abbotsbury turntable while G6 Class, 0-6-0T No 277 arrives with the daily Branch goods. The turntable is scratch built and operates fully automatically.

Photo: Jack Parker

PHOTO 7 No 304, T9 Class 4-4-0, runs through the cutting under the farm on an up passenger train for Dorchester.

Photo: Jack Parker

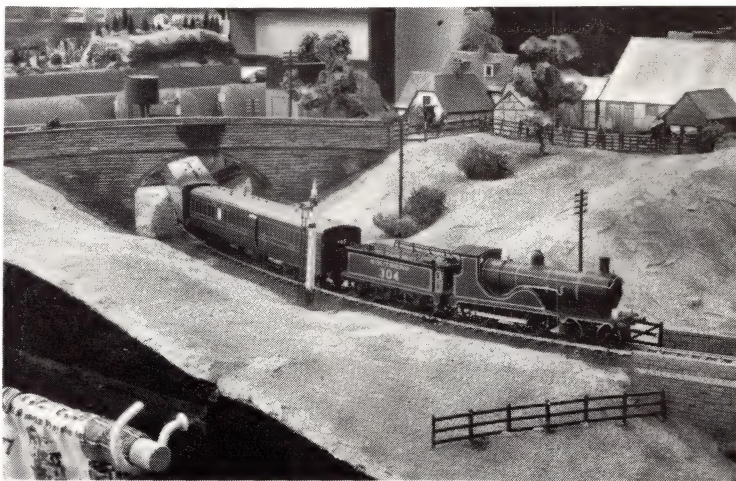


PHOTO 8 The Branch goods, with G6 Class 0-6-0T No 277 in charge, crosses Portesham Viaduct on its way to Abbotsbury.

Photo: Jack Parker

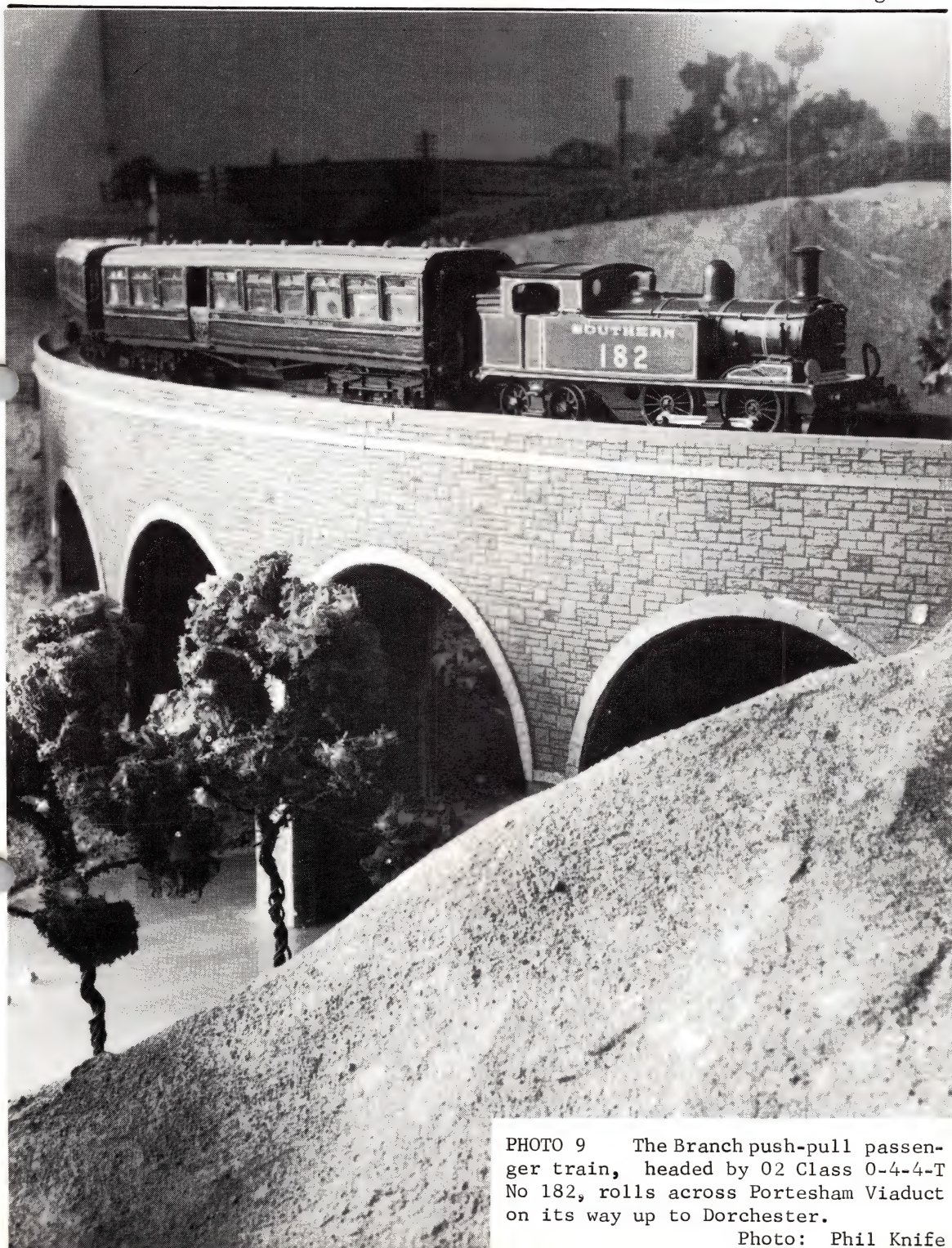
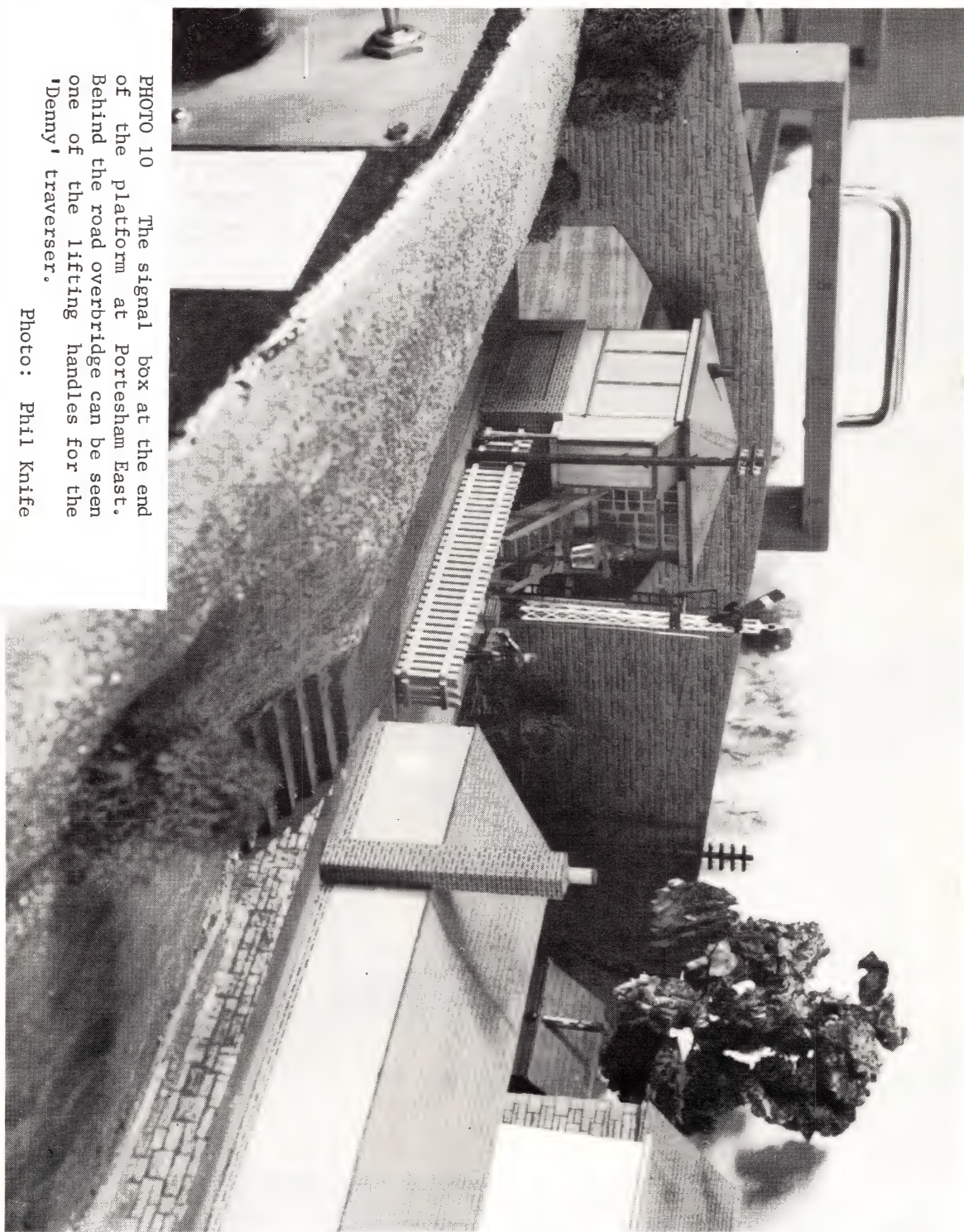


PHOTO 9 The Branch push-pull passenger train, headed by 02 Class 0-4-4-T No 182, rolls across Portesham Viaduct on its way up to Dorchester.

Photo: Phil Knife

PHOTO 10 The signal box at the end of the platform at Portesham East. Behind the road overbridge can be seen one of the lifting handles for the 'Denny' traverser.

Photo: Phil Knife



ever, it is worth mentioning that all leads are tagged for ready reference, all joints soldered and all wire runs cabled together. Baseboard joins are crossed by means of multi-pin plugs, mainly of types available from second-hand and surplus stores. Common return wiring is employed to simplify the system and all controllers are of electronic types. Ordinary resistance-type controllers are of no use on this type of layout where slow speeds are the norm and shunting moves are always taking place. Again, a little more money spent on the control system pays dividends with thoroughly reliable operation.

Before concluding, I feel I must answer the often asked question - why a British prototype? I am not British born and, in fact, was bought up in Melbourne when VR was ruled by steam (come to think of it, why did we school-boys then think those new B-class diesels were so great when they first arrived?). My fascination with the railways of Brit-

ain began a long while ago. It's the attraction of the history of the railways of Britain that holds me, with so many colourful and highly individual railways in such a small country, evident right through until the demise of steam under the present nationalised system. Add to that the support and enthusiasm that the hobby enjoys in Britain and you have your answer. I must admit, though, that support and enthusiasm is growing in Australia - a glance through the pages of this Journal will show that.

Finally, then, I hope that the accompanying photographs will describe Abbotsbury far better than all my words. It has been a pleasure to build and operate and will, I trust, be seen again in exhibitions in the future. In conclusion, my thanks are due to Ken Gray for all his hard work on my behalf, to Peter Betts for the use of his magnificent scratch-built locos at exhibitions to my small team of helpers and operators and, of course, to my wife who has to put up with it all.

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| | | | |
|-------|---|-------|-------------|
| 08.30 | — | 18.00 | MON - THURS |
| 08.30 | — | 17.45 | FRIDAY |
| 08.30 | — | 12.30 | SATURDAY |

ENQUIRIES & QUESTIONS GLADLY ANSWERED

Building HO Somersault Signals

By Ken Down

Ever since I have been making my VicRail tumbler or somersault signals, I have been having people ask 'how do you do them?'. Well, here is an article on how I do it.

The mast is a piece of 1/8" square brass, 5 inches long, turned and threaded 1/8" whitworth for one inch at one end and the final turned on the other. This makes a mast 26.5' high, not counting the final at the top or the thread at the bottom. The general layout and dimensions are shown in Fig 1. The signal arm pivots at the bottom hole and is pushed by the connecting rod from the spectacle through the top hole 45° above it. 20 gauge brass wire is used for the pivot shafts of the crank, the spectacle, the arm, the counterbalance lever at the bottom of the mast, and the safety rail around the platform. 22 gauge wire is used for the push rods etc. Drilling positions in the mast are shown in Fig 2.

The signal arm and spectacle are cut from 28 gauge sheet, and after scribing they are cut out with a jeweller's saw. I find it easier if I solder 5 or 6 strips for the arms and 5 or 6 squares for the spectacles together, and cut them all out at once. It makes it easier to cut, file and drill the thin sheet. After drilling the two 1/16" holes for the colour plates, the spectacle is finished with various shaped needle files.

The counterbalance lever is made of 20 gauge brass to give a better bearing surface. The weights are two 5/32" discs, punched from a sheet of lead, and wrapped around the lever in a jig. The baseplate is a piece of 16 gauge brass, 1/2" x 3/4". It is drilled 1/8" from one end with a 1/8" drill to take the mast which is soldered in place.

The signal arm has a small shouldered bush, which is spread with a light tap with a centre punch after it is placed in the bottom hole. A touch of solder makes it secure. I turn the bushes from 1/16" brazing rod to the dimensions shown in Fig 4. If anyone needs a few bushes, send me the blank material, and we can come to an arrangement.

A piece of 22 gauge wire, about 1" long, is passed through the bush, and a few light taps with a small hammer forms a rivet head to stop it going right through. The wire is then bent at right angles to the arm, and then bent back to form a very small radius that brings it just below the arm. It is then pushed through the No 70 drill hole in the mast and, with the curved end of the arm just covering the mast, it is soldered in place. A 1/2" pin is put through the top hole (No 72 drill again) with the head of the pin at the front of the arm. It is then bent at right angles, at the back of the arm, to become the connecting rod to the spectacle.

To join the connecting rod to the spectacle, set both the signal arm and the spectacle in the 'OFF' position. Bend the pin at right angles to the hole in the crank on the spectacle, push it through so that it comes out on the front of the crank, and cut it off to leave about 3/64" protruding. Crimp the protruding end as close to the crank as you can get with a pair of high leverage pliers. Then file enough off the end to stop the signal arm catching on it.

As mentioned before, the spectacles are made 5 or 6 at a time from 20 gauge sheet to the dimensions shown in Fig 3. Note that the hole to take the connecting rod is at a slight angle back from

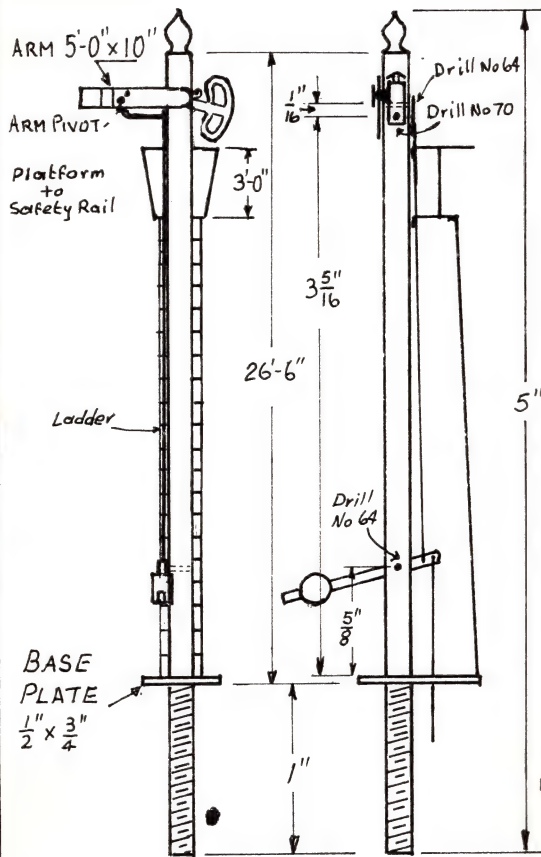


FIG 1

FIG 2

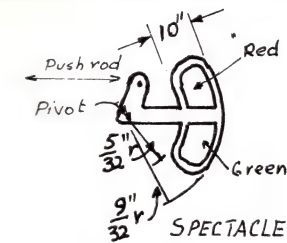
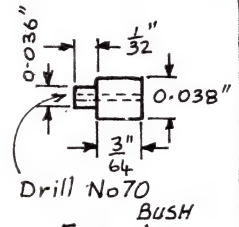
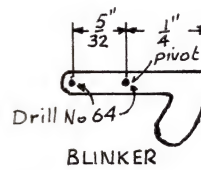
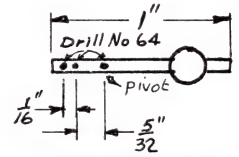
FIG 3
(TWICE FULL SCALE)FIG 4
(NOT TO SCALE)FIG 6
(TWICE FULL SIZE)COUNTERWEIGHT
ARM

FIG 5

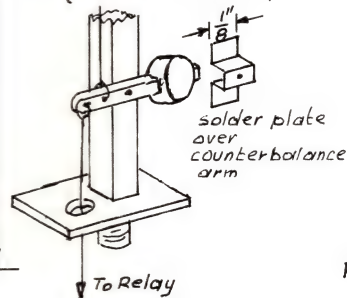
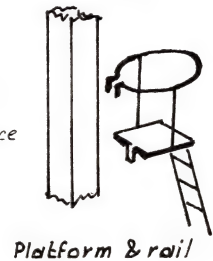
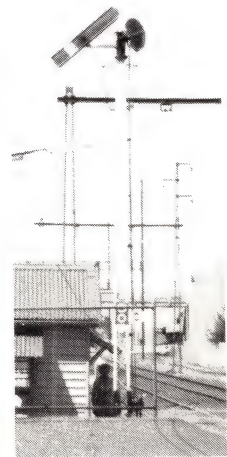


FIG 7



Platform & rail

FIG 8



FEET

10 7/19

the centre, about 10 . This stops it having a toggle effect when the arm goes up. The drill holes are at 1/16" centre to centre, on both the arm and the spectacle. The bottom hole takes the spindle that goes through the mast, and the top one takes the pin or connecting rod to the arm.

I use red and green photographic filters for the lenses, which when cut to shape, are cemented to the back of the spectacle plate with Selleys waterproof glue. I find this to be very good as it gives you plenty of time to get the lenses in place before it sets.

On the back of the mast is a plate, shown in Fig 6. You might call it a blinker because it covers the lens of the spectacle plate and stops back lighting, thus letting the signalman visually check that the signal has operated. It is also the crank to operate the signal. The blinker and the spectacle plate are soldered to the pivot pin through the mast (one on each side of the mast) and the blinker is connected to the counterbalance arm at the bottom of the mast. There are two spacers about 1/32" thick between the blinker and the mast, and between the spectacle plate and the mast, that give them a better clearance from the lamp.

The lamp is made from a piece of 1/8" brass rod, 3/16" long, which is drilled with a No 70 drill. The lamp slips on the wire protruding through the mast from the arm bracket. I hold it in place with a dab of superglue, as it is not wise to put a soldering iron near the spectacle when the colours are in place. The lamp can be improved by putting a small artificial gem in a countersink on the spectacle side. If you have lights in the right place it will glow like a lamp.

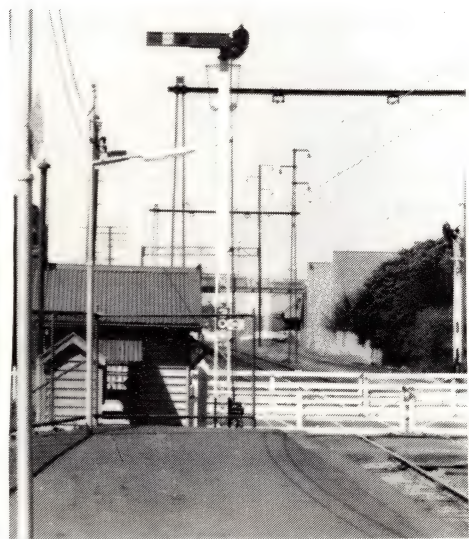
The counterbalance weight arm is cut from a piece of 20 gauge sheet, 1" long, and is filed down narrow enough to just take the three No 64 drill holes in the positions shown in Fig 5. The first hole is connected to the signal motor beneath the layout. The signal

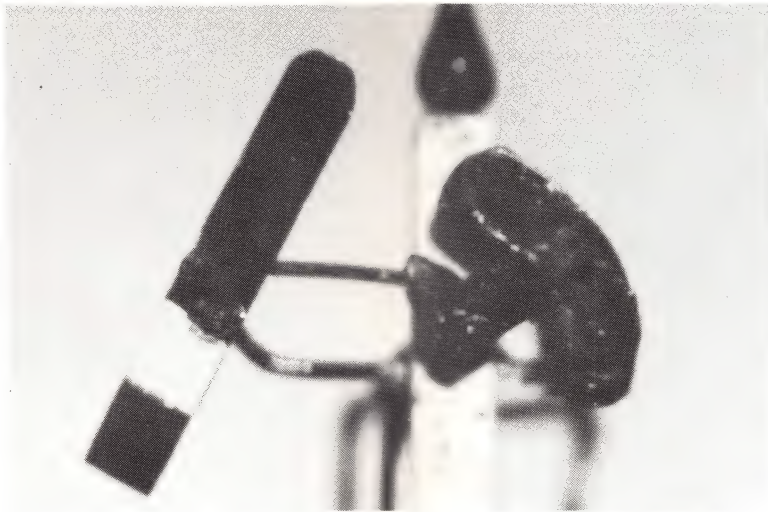
motor can be any type of solenoid or relay that you have available. The second hole takes the rod connecting the arm to the signal, and the third goes on the pin in the mast. A plate of shim brass, shaped as shown in Fig 7, holds the arm on to the pin in the mast, and also acts as a stop for the counterbalance arm. The plate is soldered to the arm by the top and bottom tags.

To connect the counterbalance arm to the signal, set the signal arm to 'OFF', and the counterbalance arm with the weight down. Bend a piece of wire at each end, and pass one end through the hole at the end of the blinker and the other through the second hole in the counterbalance arm. Then bend each end to form loops.

The platform is made from any suitable piece of brass, cut as shown in Fig 8, and soldered to the mast by the tag. The safety rail is made of 20 gauge wire, and is also soldered to the mast by its tags. It is fitted 3 scale feet above the platform. The stay is soldered under the platform, bent up to meet the safety rail, and then soldered to it.

Last of all, a piece of ladder is soldered to the edge of the platform and to the baseplate.





CLOSE UP PHOTO OF MODEL

Modular Railway Modelling : part 4

by Paul E Ingraham
Scenery and Structures

One thing to consider is a backdrop board. For displays where viewers will only see the modules from one side, a backdrop adds a nice touch to the scene and helps to round it out. The board can also act as a visual barrier against the clutter that seems to accumulate behind the modules. It greatly aids those who want to photograph your work. If you decide to use one, remember that you may have to reach over it. A height of 30 cm (10") above the track at the 1 metre (39") display height is about the limit. For operations a backdrop can get in the way. With modules near eye level and crews operating from all sides of the layout, the backdrop becomes a frustration and is better removed. The easiest way around this problem is to simply make the backdrop removable. Put it on for displays; take it off for operations.

Most modular systems have not found it necessary to unify a scenery concept. Each module is a focus at attention in

itself and viewers are not generally disturbed by the abrupt changes found in most modular set ups. The viewers simply add in the distances between scenes mentally.

One important consideration is weight. Use of lightweight foam scenery rather than heavy plaster and screen is worth investigating. Foam also has added flexibility and is less likely to crack than plaster when the module is moved.

The one thing that must be watched in scenery and structure work is that equipment clearances are not limited on the through tracks and that there is always accessibility to track for maintenance and cleaning.

Modular Specifications

It becomes clearer with each passing day that the modular idea is gaining support and new adherents among both established modellers and new hobbyists. At the same time it has become

apparent that a single set of specifications which all can follow will bring order out of the chaos that currently prevails. This is the only way that the greatest advantage of modules - the ability to share - can be achieved.

After thorough investigation of the desires and needs of modular modellers through correspondence, personal contact and a comparison of the various specifications now in use, the following set of specifications has been compiled using the best features of the systems examined. These are intended to permit optimum use of modules by clubs and individuals in both displays and operations situations. Where possible, the specifications have been drawn to accommodate work already done, but, necessarily, some modifications may be necessary to existing units to bring them up to the new specifications. Close and careful objective examination of the specifications and comparison with existing systems will show that the necessary changes are easily, quickly and inexpensively made in most cases and that no modules already built need become obsolete.

The specifications have already been tested and modules using them have been built in N and HO scales and with appropriate modifications, using Lionel tinplate. These have all been found to be vastly superior to other more limited concepts in versatility and

reliability.

It is hoped that the specifications will be self explanatory to all who use them; it is essential to the success of the concept that they are. The specifications contain only the basic required material. If deemed necessary, further data sheets could be developed as needed, but the idea is to keep the information as concise as possible and yet complete. Otherwise there are included too many 'ideas' that builders will tend to interpret as 'gospel'.

Recommendations for Manufacture

Several manufacturers have indicated interest in producing components or bits for modules. The specifications will permit this, and it is only necessary to assure that those dimensions which are fixed - module height, electrical standards and track centreline spacing, for example - are adhered to. Other than that, the choice of sizes and shapes, materials, etc, to be included in any commercial offering is unrestricted.

Any manufacturer astute enough to realise the potential of the modular idea for promoting sales is bound to succeed. The specifications and accompanying notes are intended to guide his efforts as well as those of the individual hobbyist in obtaining to most from all aspects of the modular concept.

| NMRA DATA SHEETS | | MODULAR MODELLING | |
|------------------|--------|--------------------------------------|------------------|
| OPERATIONS | SET UP | SHEET D ^M _M 5A | Issued July 1978 |

Operations

Layout Set Up: This sheet takes you step-by-step through the set up procedure.

Follow it in sequence and you will have no problems assembling a modular layout.

Once the physical arrangement of the layout has been determined and the location of each modular in it design-

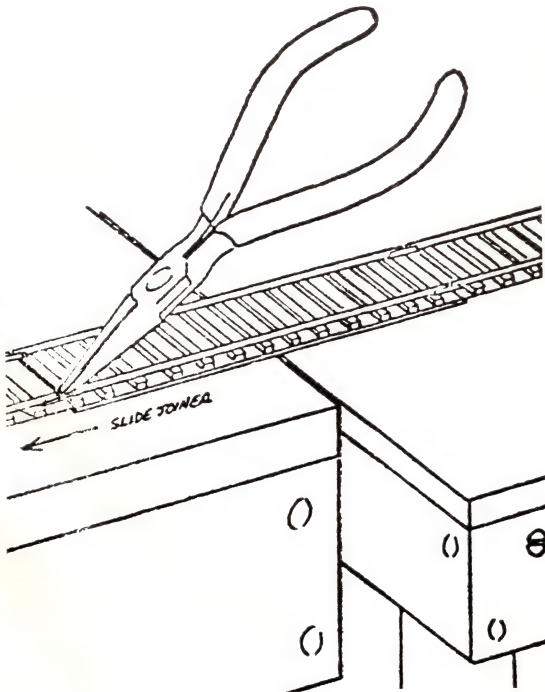
ed, proceed as follows:

A Benchmark: Set up the module on its legs at either the display or operations height as designated. Move the module into position. Level the module by raising or lowering the adjustment bolts as necessary to match the adjoining module. By sighting ACROSS the interface at eye level you can tell

when the height is correct.

Now sight ALONG the track and shift the module into proper alignment. Hold the interface in alignment and position a clamp across the interface and tighten it down. Make any necessary adjustments in the height of the unattached end before joining the next module to it.

B Trackwork: Check rail ends for damage and repair if needed. Select an appropriate connector track for the interface. Note any differences in rail code between the adjacent modules. Check the connector track for damage to rail or joiners on to any rail end not already having them. Slide the joiners FULLY ON to the rail to clear the ends. Put the connector track in place by sliding the fixed joiners onto the rails of one module. Line up the rails and slide the loose joiners into position on the rails of the other module.



Check all interfaces for proper lateral alignment and vertical adjustment. Adjust legs or clamps as needed to eliminate kinks.

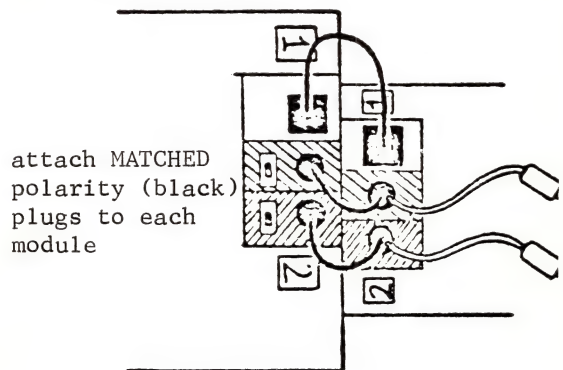
C Electrical:

- 1 Low Voltage Power Lines: Plug a 4-conductor patch cord across each interface. You can't get it wrong because the plugs are keyed to only one position.
- 2 Through Track Patch Cords: This is where most mistakes are made. Proceed step-by-step and no problems will arise. First, note the orientation of the module with respect to the adjoining one. This can be checked several ways:
 - a Check the side designation code and note whether or not side 1 on both sides of the interface faces in the same direction.
 - b Check the through track color code on the electrical panels to see if they are in the same sequence on both modules.
 - c Check the position of the four-pin socket relative to the two-pin sockets on both modules. They will either both be on the same side or on opposite sides.

Provided the builders have followed all the conventions, you will find that either -

- a everything will match, OR
- b everything will be reversed.

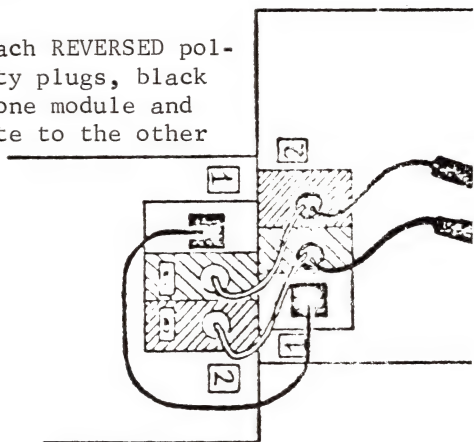
If everything matches, connect 2-conductor patch cords across each interface for each through track using SAME colour plugs as shown:



If everything is REVERSED, connect two-conductor patch cords across each through track using DIFFERENT colour

plugs as shown:

attach REVERSED polarity plugs, black to one module and white to the other

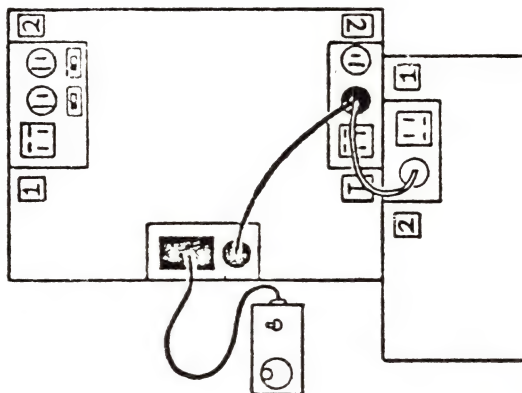


IN ALL CASES, the patch cords to straight to the next module. Through track patch cords, NEVER cross each other.

3 Track Blocking: To divide through tracks into control blocks simply throw the gap switches from the track to 'GAP' at each end of the block. All other gap switches for the track in all modules within the block are thrown to 'THRU'.

To change block boundaries it is only necessary to throw gap switches. Thus, larger blocks can be divided or smaller ones consolidated as the number of trains or operators changes. No conductor tracks or patch cords need to be touched.

4 Throttle Connection: Each track block must have a throttle connected to it. This can be plugged into ANY throttle panel within the block. Its location should be determined by visibility and operations factors and need not be at the end of a block. To avoid congestion, the cabs on parallel through track should be at different locations. Once the location is determined, simply plug the throttle into the 6-pin socket on the nearest throttle panel. Now, take the third end from the nearest 2-conductor or track patch cord for the track to be controlled from the cab and plug in into the two-pin socket on the throttle panel. It makes no difference whether the plug is black or white.



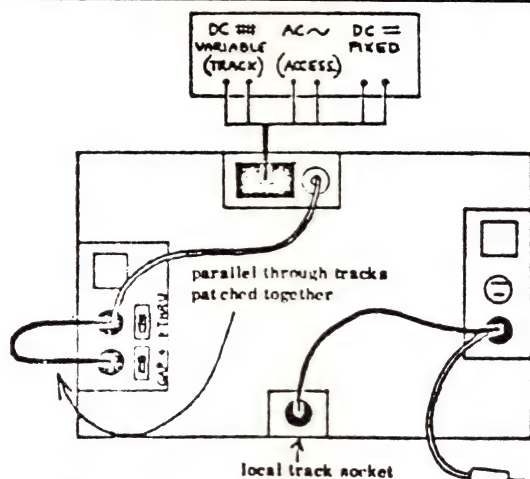
5 Low Voltage Power Input: Power may be fed from the central power supply into one end of the layout using standard four-conductor patch cords from the supply to any 4-pin socket in the layout. If it is necessary to locate the supply in the centre of a line of modules it will be found useful to have either two parallel wired output sockets on the supply or a 4-conductor wye patch cord. Thus power can be fed in both directions from the centrally located power supply. Now plug supply into a line voltage socket, switch on power and you're in business!!!

6 Line Power: If you need line power at your module, run your extension cord from an outlet to your module along the floor under the layout.

Wiring for Home Use: Your module or a group of modules can be run from a regular power pack. Simply wire the pack as described under power supplies. Then plug the 6-pin plug from the pack into any unused throttle panel. Attach track patch cords to the throttle panel as described above.

If you have multiple track, simply patch the tracks together in parallel (use same colour plugs) with a two-conductor patch cord. Throw all gap switches to 'THRU'. You can now operate the entire layout from one power pack, as shown below.

(NEXT PAGE)



NMRA DATA SHEETS

MODULAR MODELLING

OPERATIONS COMPONENT IDENTIFICATION

SHEET D^M_M5B

Issued July 1978

It is NMRA policy not to recommend specific products in its specifications. To do so could quickly render such information obsolete as product specifications and availability change. However, in these modular specifications, two areas are drawn with particular types of product in mind. In both cases these products are - and have been available from several sources and enjoy international distribution and recognition. In both cases, the products have been adopted as standard by several modular groups and therefore, in the interest of interchange and standardisation, they are identified for your information.

Drop-in Connector Track Sections:
Where a standard section is not listed below, see chart under Trackwork. In all cases, equivalent sections may be fabricated from flextrack or components.
Z/Zn - Marklin 8500 or 8592 sections
N - Atlas 2501 section
HO - Atlas 150 section, cut to 150 mm length

On3 - Kemtrack cut to 150 mm length
O - Atlas 6001 or AHM 7952 sections, cut into two - 150 mm sections

Electrical Connectors: Standard

Connectors are TRW Cinch/Jones 300 Series Connectors or compatible equivalents. These are available from electronics suppliers. Interchangeable plugs are available from Calctro (USA), Plessey Multicon (GB) and Radio Shack/Tandy (USA, Canada, Europe, Australia, Japan). Cross references for these are shown below.

| | Cinch/Jones | Radio Shack Tandy | Calctro | Plessey Multicon |
|--------------|-------------|----------------------|----------|---------------------|
| 2-pin socket | S-302-AB | 274-203 | F3 - 260 | 71/10/ 0258/03 |
| 2-pin plug | P-302-CCT | 274-201 | F3 - 240 | 71/10/ 0201/03 |
| 4-pin socket | S-304-AB | 274-206 | F3 - 264 | 71/10/ 0458/03 |
| 4-pin plug | P-304-CCT | 274-204 | F3 - 244 | 71/10/ 0401/03 |
| 6-pin socket | S-306-AB | 274-209 | F3 - 266 | 71/10/ 0658/03 |
| 6-pin plug | P-306-CCT | 274-207 | F3 - 246 | 71/10/ 0601/03 |

MODEL RAILWAY CONVENTION

A Model Railway Convention will be held at Camp Saunders conference centre Macquarie Fields, NSW, on the weekend of 1 and 2 November 1980. As with the two similar conventions held at Camp Carey in May 1979 and October 1977, this convention will be organised with family involvement in mind.

Camp Saunders is located in a beautiful bushland setting, and has its own large in-ground swimming pool. Activities for modellers will include talks discussions, clinics and a draw bar pull and slow running contest. The ladies and children will have the option of visiting local places of interest. General activities will include a visit to the NSW Rail Transport Museum, and feature films with some railway flavour.

Each family that attends will be guaranteed their own private room. The cost of the convention will be approximately \$18 for adults and \$12 for children which will include accommodation, all meals and activities, and at that price it is cheaper than staying at home. Delegates who wish to attend the convention, but not live in, may just pay pro-rata for their meals and activities.

Absolute preference will be given to non-Sydney area residents, so why not get a party together and come to Sydney for this weekend, or if you are entitled to a concession ticket on the railways or airlines, use it for this purpose.

Those wishing to attend should send a deposit of \$2 per person to Mr J McInerney, 6/236 Slade Road, Bexley North, NSW 2207, stating the age of their children if any will be accompanying them.

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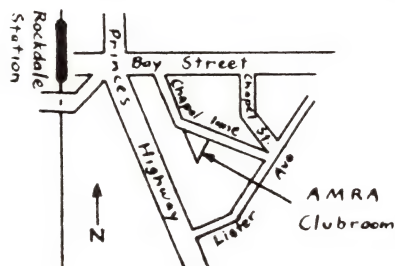
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BRANCH NOTES

NEW SOUTH WALES BRANCH NOTES



The following is the program for January to March 1980:

JANUARY

- | | |
|-------------|---|
| 11 Friday | Layout operation |
| 19 Saturday | Kit bashed rolling stock Display and explain your construction techniques |
| 25 Friday | Layout operation - show off your Christmas purchases |

FEBRUARY

- | | |
|------------|---|
| 2 Saturday | State Branch AGM and layout operation |
| 8 Friday | Modelling Clinic and layout operation. How to use ammeters and voltmeters |
| 8 Saturday | Auction - goods in by 2 pm |
| 22 Friday | Modelling Clinic (contd) and layout operation. How to calibrate and set up meters |

MARCH

- | | |
|-------------|----------------------------------|
| 1 Saturday | Ladies AGM and layout operation |
| 7 Friday | Slide night (watch notice board) |
| 15 Saturday | Layout operation |
| 21 Friday | Layout operation (by time table) |

Unless specified, meeting times are

as follows:

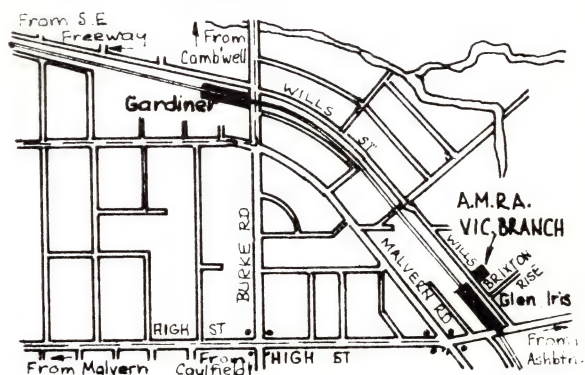
Fridays - 7.30 pm to 11 pm

Saturdays - 2 pm to 5.30 pm

NOTE : LAYOUT OPERATIONS

Wall layout used for NSW or timetable operations. Tickhole and Hawkesbury layouts will also be available for operation of members' equipment, on all occasions, unless withdrawn for Exhibition.

VIC BRANCH NOTES



AMRA Victorian Branch meets at 92 Wills Street, Glen Iris. Meetings are held on the second Thursday of each month. The meetings start at 8.00 pm, but the clubrooms are open at 7.30 pm for operation on the layouts.

Working nights on the Club layouts are held every Tuesday, except the Tuesday before the Club meeting. Work begins at 7.30 pm. Operation on the layouts also occurs on the last Sunday of the month between 1.00 and 5.00 pm.

A working bee, to maintain your clubrooms, will be held on Sunday 17 February 1980. Bring your lunch, and come along and help.

Our Annual Exhibition will be held once again over the Moomba weekend, 7 to 10 March. Staff is still needed to man the exhibition, and your help would be appreciated.

The agenda for the next four months is as follows:

JANUARY

8 Thursday No regular meeting, but the layouts will be open for operation

FEBRUARY

12 Thursday Guest speaker - Don Potts of Steamrail
Competition - Freight loading equipment
Working bee on Clubroom

17 Sunday

MARCH

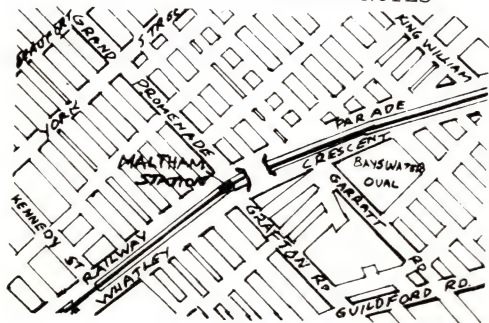
13 Thursday Clinic - layout construction
Competition - photograph of freight crane

APRIL

10 Thursday Annual auction - bring your money, or things to sell
Competition - Model of goods vehicle

Graeme Nitz
Branch Reporter

WESTERN AUSTRALIAN BRANCH NOTES



The Branch meets at Meltham Station on the first Monday of each month, at 8.00 pm, and at other times as indicated on your program in the 'Branch Line'. Visitors and prospective mem-

bers of AMRA are always welcome at any of our meetings. For further information contact the Secretary, Mrs Laura Hartmann, PO Box 60, Maylands.

The Clubrooms will be open at least 15 minutes prior to starting times, which are as follows:

Monday and Wednesday - 8 pm

Saturday - 2 pm

At General club activities meetings the Library will be available and the Sales Cupboard will be open. Of course there will always be other modellers to talk to. These meetings will also be used to further develop our layouts, and for members to run their trains on these layouts.



FOR READERS LETTERS

The Editor

Dear Rex

Browsing through back numbers of Journal, I came, from time to time, on the old question (or complaint) 'What do I get out of membership of AMRA?' One city member, having penned his own personal Jeremiad, was moved to wonder what, if anything, the lone country member got out of it. As one such member, perhaps I can answer that problem, at least, from my own point of view.

My home is in a small town, 231 miles from Brisbane by rail, with no fellow enthusiasts, as far as I know, within a radius of 50 miles or upward; and in an area where hobby shops outrival the proverbial hens' teeth in scarcity - in short, there are none, and my visits to the metropolis do not exceed two a year. To me, membership of AMRA means contact with fellow hobbyists, mainly through the pages of Journal. On receipt of each number, I first thumb through it

for items of special interest to me, but always end up by reading the lot. Even then it is not finished with, for it goes on to a shelf along with its predecessors of nearly 25 years, and every now and then I take down a handful of these and go through them again.

Over the years, I have become familiar with the names of a number of people, of whom I have met only a very few, and corresponded with a few more, but the great majority of whom I can scarcely hope to meet. Yet I feel that I know them and regard them as friends. I have shared their knowledge through articles they have written, and learned something of their opinions from 'Pop Valve'. In return, I have had the chance from time to time, to present my own ideas and opinions, and to share some of the knowledge which I have picked up here and there. From my membership I have gained a feeling of 'belonging', and a window on the world of Australian Model Railways.

So, let me wish long life to AMRA and Journal, and the same to that handful of heroes, who, by their unselfish efforts over the years, have made both possible. All the best to you all! I owe you a lot.

Jack Makin

The Editor
Dear Rex

In response to your Editorial in Journal 133, I enclose several photographs which may be suitable as fillers. I would suggest that photos 1, 1A and 1B be shown together, and similarly photos 2 and 3, and photos 4, 5 and 6. Trim the photos as you consider necessary.

Two other points of interest arise in Journal 133 for readers information.

Firstly, the diagram on page 15 for the 'Simple Power Supply and Relay Signal Control' (Fig 2) specifies a 50 ohm resistor in series with the L.E.Ds. This value of resistance results in an L.E.D. current of approximately 120 mA which is well in excess of their rat-

ings of not more than 20 mA. Operating the L.E.Ds. at 100 mA will shorten their operating life. A resistor value of at least 180 ohms or greater will suffice ($\frac{1}{4}$ W or $\frac{1}{2}$ W power rating).

The second correction is to the caption of the photo on page 31.

Hamersley Iron is not spelt with two 'm's', also no locomotive is numbered 3045 (3006 - 3017 only). Furthermore no crushing of ore is done at Dampier as it has been crushed and screened at the mines. The fourth loco would appear to be another 3000 series C636, by the shape of the bogies and the depth of the valance below the walkway. The lead loco and third loco are M636 Alcos.

Yours faithfully

Bruce Norton

The Editor
Dear Rex

I see in one of your Editorials that you are short of copy and fillers. I am only a new member (15 months) and have not been able to get to the Branch meetings as I seem to be on afternoon shift most of those nights, and I do not relish travelling from Ballarat at night. So the Journal is the only way I get to meet other members.

As a series of fillers, why not get members to write small articles on themselves. Perhaps the Office Bearers could set the example and others might follow. That way we can all get to know who all those names belong to.

I am still in the planning stage of my layout, but it will be built on the Modular concept so that I can have completed sections in use. I thank that I might have given myself a hard task, as I follow VR in HO, VR and American in narrow gauge, so fitting elements of all of that may take some doing.

However, we are all in this hobby for the pleasure we get out of it. To all those who only seem to have complaints, I would say that if they took

the same time to write something useful, we might all benefit.

If there is any way I can be of assistance to you, I would like to help if I can.

Paul Richie

Queensland Railways C16 Steam Locomotive No. 38

by S Malone

THE PROTOTYPE

This loco was built in 1916 by Walkers of Maryborough, Queensland, who built about one third of the total number built, which was 152, between 1903 and 1918.

The C16s were introduced to handle trains and cattle traffic in the Central and Northern Divisions. Due to heavy patronage on the Sydney Mail, which ran from Wallangarra to Brisbane, and was the most important train in Queensland for many years, a couple of C16s were placed successfully into working this train, before heavier motive power could be introduced.

From June 1942 until June 1944, No 38 was hired to the Commonwealth Railways to help out there as a NMB class loco. There were eleven C16s hired to the Commonwealth Railways around this time.

From 1945 onwards, most of the C16s received master mechanics smokeboxes, which was to improve steaming, and these locos could be easily distinguished by the tapered stovepipe chimney which was fitted during the modification. No 38 was one such fitted.

By the 1950s, the C16s were generally in a run down condition, and were mainly used on shunts, or slow goods traffic. No 38 was attached to the Rockhampton Depot as steam working drew to a close, but after 1969 she was kept at Ipswich Railway Workshop for excursion

train working along with many other locos. She was last steamed in 1971, and scrapped soon after due to a minor boiler fault. She was the last C16 to run in Queensland.

THE MODEL

This loco is scratch built using a KTM 5 pole motor (DH13), Romford driving wheels and gears, Bergs 9 mm pony track wheels and some old Central Valley bogies for the tender. The side and coupling rods are HO Peco nickel silver rail with foot filed down so it is the same width as the head of the rail. The crosshead guides are Peco N gauge rail with the tops of the rail facing inwards. The crossheads were made of 1/16" brass plate, with a saw cut on opposite edges so they slide between the rails. The eccentric rod is also a piece of N gauge rail with the foot filed off.

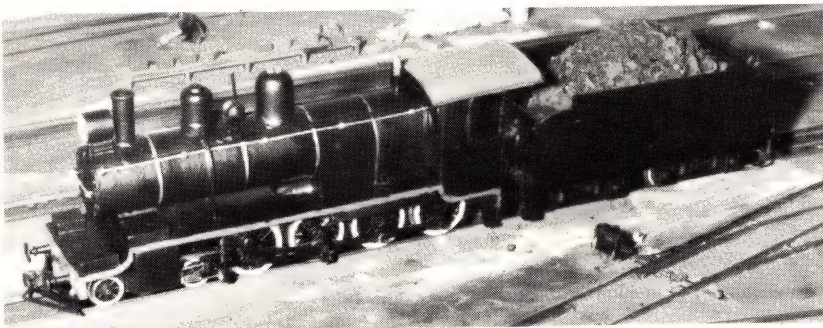
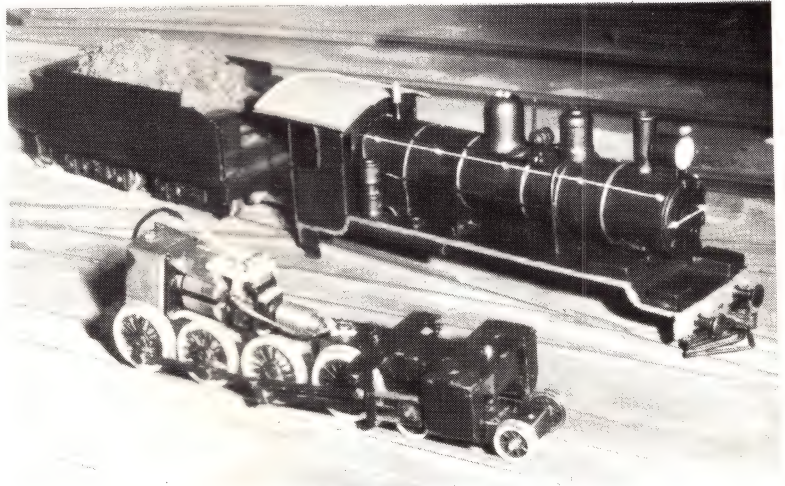
The tender, cab and running boards were fabricated from 0.010 shim brass, soldered together with an 80 watt soldering iron, using Bakers soldering fluid for flux and acid cored solder or resin cored solder. The former is better but is sometimes hard to get hold of. Of course all parts must be washed thoroughly after soldering to prevent corrosion. The boiler and all round parts were turned from brass in a Unimat lathe. The boiler and smokebox were turned in one piece, in this operation, a piece of 7/8" 16 gauge brass tube was squared off at one end and a piece of 1/16" brass plate soldered on this end using a fine gas flame. A very good tip giving a fine flame is available for gas bottles now. The excess brass from the plate on the end of the tube is cut off and the other end of the tube is placed in the lathe chuck. A 3/32" hole is drilled in the centre of the brass plate once the tube is running true in the lathe. This so a centre can be placed in the tailstock to provide support while turning down the tube, leaving the boiler bands on.

The smokebox door and detail can also be turned on. The tailstock can then be withdrawn, and the hole can be filled with Plastibond or similar and allowed to dry. The excess can then be carefully turned or filed down so the

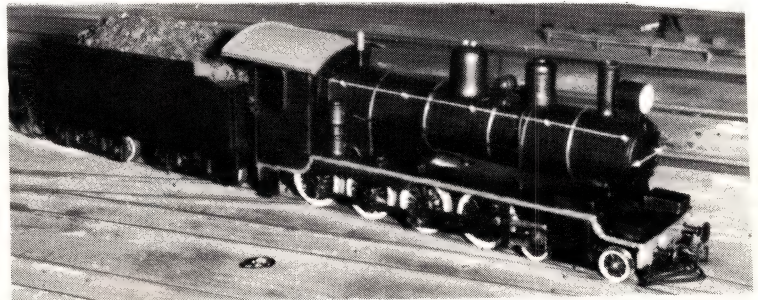
smokebox front is complete.

The main boiler fittings are soldered on with a gas flame and the smaller items and the piping (copper wire) were soldered on with the 80 watt soldering iron.

The loco with the top removed showing the motor and mechanism. The crankpins used here are 10BA screws with the nuts soldered on lightly. Although better crankpins are available now at hobby shops



Other views of the model. At the time of the photo, no number plates of builders plates were fitted.



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Locomotive Efficiency Competitions

By Peter Betts

Introduction

It is one thing to build a model railway locomotive which, from an appearance point of view, is of high class by competition standards, and another to build one that performs to high standards. The efficiency of a model locomotive is judged on its hauling ability in terms of its physical size and its ability to run smoothly and slowly.

At the model railway convention held at Wentworth Falls, NSW, in May 1979, competitions were held for the loco with the highest draw-bar pull relative to size, and a slow running contest where by the loco that covered the least distance in a given time, without stalling, was deemed to be the best.

Draw-Bar Pull

It is easy to make a large loco pull

a heavy load, but to make a smaller one pull the same load, needs some skill. One could handicap locos by weight, but this would not benefit the modeller who had skillfully filled the loco with as much weight as possible. Therefore the handicap system should be based on the volume or physical dimensions of the loco.

The effective volume of a loco is a debatable point, but the formula that has been decided upon by the Convention Committee, is taken as the product of length, width and height, according to the following:

- 1 The length between buffer beams of a tank engine or non steam loco; or the length between front buffer beam and loco draw-bar plate of a tender

loco, irrespective of whether the loco is tender drive or not.

- 2 The overall width of the loco.
- 3 The height above the rails of the fire box top of a round boilered loco, or the top of the outer casing of other locos.

The steam loco would appear to be getting its boiler fittings and cab top free of charge, but then the non steam loco would have the advantage that more weight could be got into its rectangular section body than the round section of a steamers boiler. Although the tender of a steam loco is not included in the volume measurement, the loco is nevertheless obliged to haul its tender during the test. A Garratt or Shay, are of course considered as tank engines. Some compromise has to be used when deciding the effective height of some odd shaped locos such as the electric 'CROCODILES'.

The volume as calculated by the above formula is divided into the maximum draw-bar pull as measured by dead weights hanging from a thread over a pulley and the resultant is the co-efficient of hauling performance of the loco. The pull and the volume may be measured in any convenient units provided that they are consistent for all entries.

The draw-bar pull efficiency contest at the recent Convention was won by Ray Anderson from Gladstone, Queensland, with an OO scale GWR 56XX class 0-6-2 tank on a Hornby chassis, with steel tyred wheels. Apart from the advantage of steel tyres (on nickel silver track), the body was crammed full of lead. The highest draw-bar pull was exerted by Norm Read's O scale Shay, the pull being equivalent to the weight of \$8.45 worth of 20 cent pieces. The strongest HO loco was Victor Hogan's DB 2-10-0, with \$2.80, a heavy weighted loco which came second, corrected for size.

Slow Running

Slow running tests are fun when locomotives compete in pairs in a knock-out contest. Starting with their buffers in line and both locos moving,

the two contestants must keep moving for 30 seconds, after which, the one which has travelled furthest, or the one which stalled first, is eliminated.

At the Convention at Wentworth Falls, two identical electronic controllers were used, each with a half wave pulse. So slow did the majority of the locomotives run that the judges had difficulty deciding whether they were moving at all. It is felt that future competitions could be carried out with controllers which do not incorporate any slow moving aids.

On this occasion, the competition was won by Ron Lees from Woy Woy, NSW, with an OO scale LMS 4F class 0-6-0 with an Airfix motor. Rob's cool skill at the controls was as much a contribution to the result as the excellent performance of his loco.

Conclusions

Locomotive efficiency contests are very informative when one analyses the winning locos. Highest draw-bar contests tell you very little. From past experience it has been found that 'Mazak' wheeled tyres produce about twice the friction as brass, steel or aluminium alloy, and about four times the friction as nickel silver or chromium plating. However three poles motors are usually more powerful than five pole.

Whatever the outcome of any locomotive competitions, they are all good fun and this after all is the important thing.

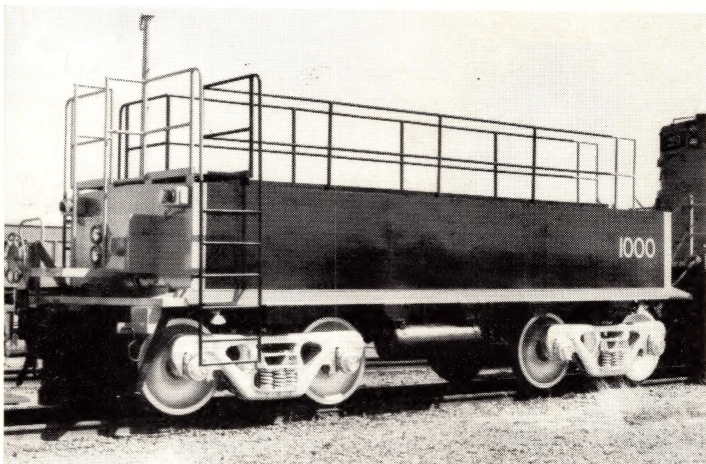
A.M.R.A. HON. LIFE MEMBERS 1979

Tim Dunlop
Margaret Dunlop
Alan Wilson
Rick Richardson
Arthur Harrold
Jack Treseder
Cedric Rolfe

Faith Dean
Ernie Dean
Norm Read
Rex Little
Maurie McKinnon
June Dunn

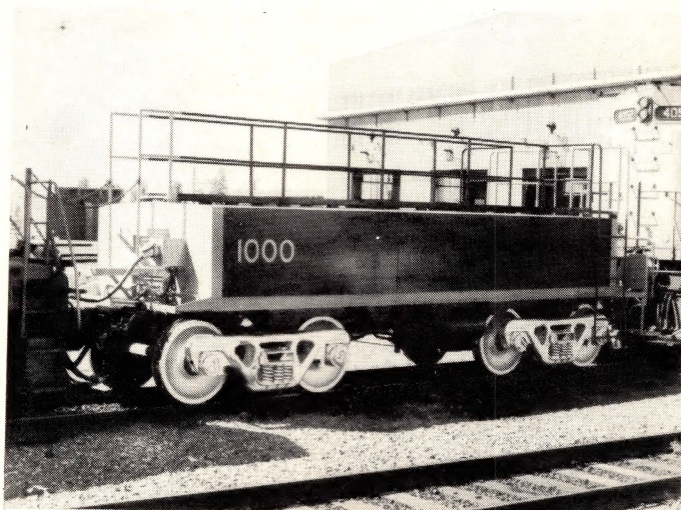
$$11.43 \text{ gm} \times 114 = 1302.42 \text{ gm} \quad 11.43 \text{ gm} \times 42.25 = 482.99 \text{ gm}$$

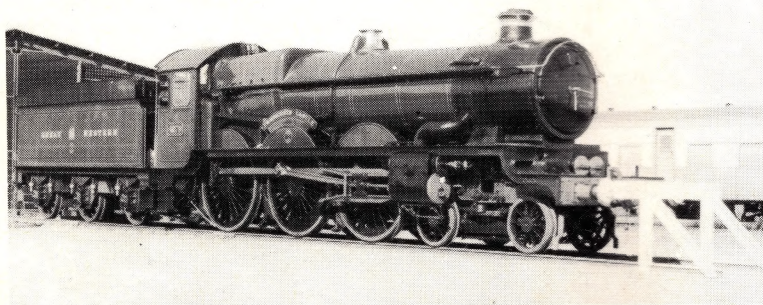
Locomotive 1000 and brake tender, outside '7 mile' workshops, Dampier, WA. 1000 is the low hood version of the standard US Alco C415. Tare weight of the loco is 125.9 tonnes.



Brake tender for loco 1000, based on an ore car chassis and ballasted with rail to 55.6 tonnes

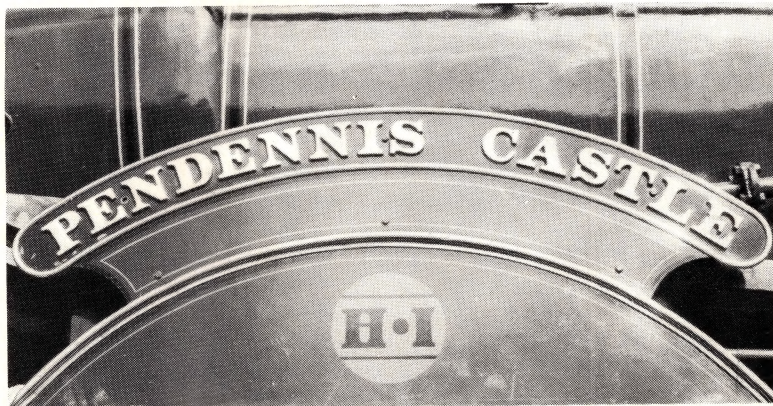
Semi-permanent couplings and connections between loco 1000 and the brake tender. The purpose of the brake tender is to increase the braking capacity of the loco when handling rakes of wagons with brakes released.





Pendennis Castle - over the ash pit at the '6 mile' compound of the Pilbara Railways Historical Society, who are the custodians of 4079, which is owned by Hamersley Iron

The transfer on the splashers over the centre driver reminds visitors of the ownership of Pendennis



WHAT PRICE REALISM

By Jack Makin

In the course of thirty years or so of involvement with the Model Railway Hobby, I have seen many layout plans and a few actual layouts, and I am sorry to have to say that the great majority of them, when their convolutions have been unravelled and analysed, have turned out to be no more than glorified versions of the circle of track provided by the manufacturers of boxed train sets. In other words, although some of them had terminal spurs and return loops incorporated, they all depended

on the continuous principle to obtain length of run.

For the first few years of my contact with the hobby, I inclined to this form of layout myself, and could produce a number of ingenious arguments to support my opinion. But in the July 1954 edition of the now defunct 'Hobbies Illustrated', there appeared the first of a series of six articles entitled 'Full Sized Practice For Your Model Railway', by none other than the late

Mr C C Singleton, in which he expressed the opinion that the only realistic form of layout was the 'point to point', and that no railway-minded man would waste his time with any other. Now, Mr Singleton was no bumbling amateur or starry-eyed idealist; he was, in fact, a professional railway engineer in the service of the (then) NSWGR, a member of the ARHS, and a modeller of long standing. So we may take it that he knew what he was talking about. I found myself completely convinced by his arguments, and from that time, barring a brief lapse when I first took up OO, I have been a protagonist of that form.

I am not condemning the fellow who is compelled by necessity to build his layout in an area approximately that of a ping-pong table, and who must go continuous to provide space to run his trains at all, still less the designers of exhibition layouts whose main object is to entertain the public and their children who want to see trains in action; but I must take issue with the chap who, having space enough for a point-to-point, albeit a short one, persists not only in using the continuous method, but leaves it with hardly any station facilities, and peppers it with unguarded junctions, whose only purpose is to cause the trains to run even more like Eric Watson's 'demented mice', than would otherwise be the case.

It amazes me, that many fellows who are prepared to spill their last drop of ink in defence of some scale or gauge, or some standard of wheel dimensions and/or profiles, all in the cause of truth to prototype, seem to have very little to say about how the railway on which their super models are to run is planned and operated. After all, AMRA is a Model Railway Association, not a Model Engineering Society, and if the component parts are to be constructed realistically, so should the line as a whole. At the risk of repeating what has often been said before, may I remind my readers (if any) that a real railway is a device

for conveying goods, passengers, etc, from A to B by the shortest route which the topography of the country and the need to preserve a practical standard of levels and curvature allows. It is not, repeat NOT, an exercise of getting from nowhere to nowhere by the longest possible route. A model railway, if it is to truly represent prototype, must, like a good story, have a beginning, a middle and an end, as well as a purpose, even if the latter is only imaginary.

I hope that next time some protagonist of 'fine scale' gets up on his hind legs to condemn the humble fellow who, perforce, uses proprietary equipment of doubtful standards, he first enquire whether the latter's railway is built and/or run more closely to real railway principles than his own, and if so, that he sits down again and holds his tongue.

And I would ask those who, perhaps in ignorance, have built an unrealistic layout, that they find out what real railway principles are, and take a look and do something about it!!

A.M.R.A. MERITORIOUS AWARDS 1979

| | |
|-----------------|----------------|
| Ivo Bunker | Eric Doherty |
| Bob Correll | June Larmour |
| Alan Dowel | Fyfe Thorpe |
| Stephen Suggi | Eric Lyon |
| Rex Little | John Skilton |
| Norm Read | Keith Robinson |
| Jack Treseder | Dot Treseder |
| Mal Baker | Tony Gray |
| John Sneddon | Jim Christie |
| John Dunn | Jack Parker |
| Graham Larmour | Rup Ackland |
| Ken Down | Bill Morehouse |
| David Ellis | George Bray |
| Arthur Robinson | Arthur Hayes |
| Bruce Lovett | Simon Mead |
